Title (en)

FABRICATION OF LUMINESCENT QUANTUM DOT THIOL-YNE NANOCOMPOSITES WITH TAILORABLE OPTICAL, THERMAL, AND MECHANICAL PROPERTIES

Title (de)

HERSTELLUNG VON LUMINESZENTEN QUANTENPUNKT-THIOLYN-NANOKOMPOSITEN MIT ANPASSBAREN OPTISCHEN, THERMISCHEN UND MECHANISCHEN EIGENSCHAFTEN

Title (fr)

FABRICATION DE NANOCOMPOSITES THIOL-YNE À POINTS QUANTIQUES LUMINESCENTS PRÉSENTANT DES PROPRIÉTÉS OPTIQUES, THERMIQUES ET MÉCANIQUES MODULABLES

Publication

EP 3694953 A4 20211013 (EN)

Application

EP 18865602 A 20181005

Priority

- US 201762570878 P 20171011
- US 2018054746 W 20181005

Abstract (en)

[origin: US2019106624A1] This disclosure concerns a method of making a ligand for Quantum Dot functionalization, a method of making a functionalized Quantum Dot (QD) with a ligand, and a method of making a transparent luminescent quantum dot thiol-yne nanocomposite with tailorable optical, thermal, and mechanical properties. The prepolymer solution and functionalized Quantum Dot can be used in additive manufacturing.

IPC 8 full level

C09K 11/02 (2006.01); **C07C 323/60** (2006.01); **C08G 75/23** (2006.01); **C09K 11/88** (2006.01)

CPC (source: EP US)

C07C 323/60 (2013.01 - EP US); **C07D 339/04** (2013.01 - US); **C08F 138/00** (2013.01 - US); **C08G 75/23** (2013.01 - EP); **C09K 11/02** (2013.01 - EP US); **C09K 11/886** (2013.01 - EP US)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 11180696 B2 20211123; **US 2019106624 A1 20190411**; EP 3694953 A1 20200819; EP 3694953 A4 20211013; US 2021324269 A1 20211021; US 2022228061 A1 20220721; WO 2019074803 A1 20190418

DOCDB simple family (application)

US 201816153357 A 20181005; EP 18865602 A 20181005; US 2018054746 W 20181005; US 202117363526 A 20210630; US 202217713983 A 20220405